

What is claimed is:

1. An optical fiber connector comprising:
  - a housing having an inner surface defining a cavity extending longitudinally therethrough and a spring element seat disposed therein, the housing also defining a forward opening in communication with the cavity and a rearward opening in communication with the cavity;
  - a spring element inserted into the cavity through the forward opening of the housing; and
  - a ferrule holder inserted into the cavity through the rearward opening of the housing.
2. The optical fiber connector according to claim 1 further comprising a spring element retainer disposed about a forward end of the ferrule holder, wherein the spring element is disposed between the spring element seat and the spring element retainer and urges the ferrule holder forward with a predetermined spring force.
3. The optical fiber connector according to claim 2 wherein the predetermined spring force is greater than about 1 lb.
4. The optical fiber connector according to claim 3 wherein the predetermined spring force is between about 1.1 and 1.4 lbs.
5. The optical fiber connector according to claim 1 further comprising a ferrule disposed in the ferrule holder, and an optical fiber stub disposed within the ferrule.
6. The optical fiber connector according to claim 5 further comprising a view port for providing a visual indication of the quality of a splice between the optical fiber stub and a field fiber.

7. The optical fiber connector according to claim 1 further comprising a cam member disposed about the ferrule holder.
8. The optical fiber connector according to claim 7 further comprising a first and second splice member disposed within the ferrule holder.
9. An optical fiber connector comprising:
  - a housing having an inner surface defining a cavity extending longitudinally and a spring element seat therein, the housing also defining a rearward opening in communication with the cavity and a forward opening in communication with the cavity;
  - a ferrule having first and second ends and a passageway disposed axially therebetween;
  - an optical fiber stub disposed within the ferrule passageway;
  - a ferrule holder extending longitudinally between opposing first and second ends and defining a passageway extending longitudinally therebetween, the ferrule holder first end inserted through the housing rearward opening and extending beyond the spring element seat and configured to hold the ferrule, the ferrule holder being slidable longitudinally within the housing;
  - a spring element retainer disposed at the first end of the ferrule holder;
  - a first and second opposed splice member disposed within the ferrule holder, each splice member extending longitudinally from a first end proximate the second end of the ferrule to an opposite second end, one of the splice members including a longitudinal fiber aligning groove wherein the optical fiber stub extends between the opposed splice members in the groove and terminates at a position intermediate the first and second ends of the splice members;
  - a cam member disposed about the ferrule holder, the cam member having a first end and a second end and a passageway extending longitudinally therebetween; and
  - a spring element disposed between the spring element seat and the spring element retainer, wherein the spring element urges the ferrule holder forward with a

predetermined spring force.

10. The optical fiber connector according to claim 9 wherein the first and second splice members are configured to allow a field fiber to be inserted axially between the second ends of the splice members toward the first ends thereof such that the field fiber is guided by the groove into abutment with an end of the optical fiber stub.
11. The optical fiber connector according to claim 10 wherein the cam member passageway comprises a major axis and a minor axis.
12. The optical fiber connector according to claim 11 wherein at least one of the first and second splice members comprises a keel portion, the cam member being movable between an initial position wherein the keel portion is aligned with the major axis allowing the splice members to move apart to facilitate insertion of the field fiber therebetween, and a final position wherein the keel portion is aligned with the minor axis in which the cam member urges the splice members in the vicinity of the intermediate position thereof relatively toward each other to clamp the field fiber and the optical fiber stub therebetween.
13. The optical fiber connector according to claim 9 wherein the housing inner surface further defines a key extending into the cavity.
14. The optical fiber connector according to claim 13 wherein the ferrule holder comprises a groove for slidably engaging with the housing key.
15. The optical fiber connector according to claim 9 wherein the ferrule holder comprises a port for providing a visual indication of the quality of a splice between the optical fiber stub and a field fiber.

16. The optical fiber connector according to claim 9 wherein the spring element, the spring element retainer, the housing and the ferrule holder are structured and arranged such that the spring element and the spring element retainer are inserted into the forward opening of the housing in the rearward longitudinal direction until cooperative retaining elements formed on the spring retainer and ferrule holder engage each other to fix the spring element retainer onto the ferrule holder.
17. The optical fiber connector according to claim 16 wherein the cooperative retaining elements comprise a screw thread.
18. The optical fiber connector according to claim 16 wherein the cooperative retaining elements comprise a ridge.
19. The optical fiber connector according to claim 9 wherein the housing comprises a latching arm extending from the housing.
20. The optical fiber according to claim 12 wherein the movement of the cam member from the first position to the second position comprises rotation of the cam member on the ferrule holder.
21. The optical fiber connector according to claim 19 further comprising a trigger element configured to cooperate with the latching arm.
22. The optical fiber connector according to claim 9 wherein the ferrule holder comprises a stop disposed at an intermediate position between the ferrule holder first and second ends and configured to cooperate with the housing rearward opening

23. An optical fiber connector comprising:

a port for providing a visual indication of the quality of a splice between a first and second optical fiber within the connector.

24. A method of determining the quality of a splice between first and second optical fibers within an optical fiber connector comprising:

passing a visible light through at least one of the optical fibers; and  
viewing a view port on the connector for a visual indication of the quality of a splice between the first and second optical fibers.

25. The method according to claim 22 wherein the visible light comprises light from a laser or an LED.

26. The method according to claim 22 wherein the visual indication comprises a presence or absence of light from the view port.

27. The method according to claim 22 wherein at least one of the optical fibers is an optical fiber stub.

28. The method according to claim 22 further comprising abutting the first and second optical fiber within the fiber connector.